

CLAIMS

1. An assay device for determining an analyte in an aqueous sample comprising:
- 5 (i) an elongate flow matrix (6) allowing lateral transport of fluid therethrough by capillary action, wherein said matrix comprises a liquid application zone (3) and downstream thereof, a detection zone (8) having an immobilized capture agent capable of directly or indirectly binding to said analyte,
- 10 (ii) a wicking member (13) placed at the downstream end of the flow matrix and having an upstream end and a downstream end, and
- (iii) a time indicator (14) placed downstream of the detection zone (8) for indicating when liquid applied in the liquid application zone has reached the time indicator, wherein the time indicator comprises an indicator substance or substance combination which is capable of exhibiting a
- 15 visible colour change when hydrated by the aqueous sample,
- characterized** in that the time indicator (14) is arranged in contact with the wicking member (13) at a variable position between the upstream and downstream ends thereof, thereby permitting variation of the time elapsing from the application of the liquid until the indicator substance or substance
- 20 combination changes colour.
2. The device according to claim 1, **characterized** in that the time indicator substance comprises a single chemical compound capable of changing colour when absorbing water.
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3. The device according to claim 1 or 2, **characterized** in that the time indicator (14) is applied to the wicking member (13).
4. The device according to claim 3, **characterized** in that the assay device
- 30 comprises a housing (1, 2) enclosing the flow matrix (6) and the wicking member (13), and that the time indicator (14) is applied to the inner side of the housing (1) at a transparent or translucent portion thereof.

5. The device according to any one of claims 1 to 4, **characterized** in that time indicator includes a hygroscopic substance.
6. The device according to any one of claims 1 to 5, **characterized** in that time indicator includes a filler substance.
7. The device according to any one of claims 1 to 6, **characterized** in that time indicator comprises a substance mixture attached to the wicking member or the inner side of the housing by tape.
8. The device according to any one of claims 1 to 6, **characterized** in that the time indicator comprises an indicator substance or substance combination applied to a support (14) which in turn is applied to the wicking member or inner side of the housing.
9. The device according to claim 8, **characterized** in that the support (14) comprises a strip of solid material, e.g. a strip of filter material.
10. A method of performing an assay for determining an analyte in a sample, **characterized** in that the method comprises the steps of:
 - (i) providing an assay device as defined in any one of claims 1 to 7, wherein the time indicator is placed in a selected position between the upstream end and the downstream end of the wicking member adapted to the assay to be performed,
 - (ii) flowing sample and assay liquid(s) through the flow matrix of the device such that they reach the detection zone in a predetermined sequence, and
 - (iii) when the time indicator has changed colour indicating that a predetermined time has elapsed from the application of liquid to the liquid application zone, reading the result of the assay in the detection zone.